

cited in OIA

DERWENT PUBLICATIONS LTD

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62529Y/35 SHUR N F M27 SHUR/ 03.07.75
 03.07.75-SU-151206 (01.03.77) C22c-38/40
 *SU-544-709

Heat-resistant ferrous alloy - contg. additional aluminium and rare earth metals to improve high temp. strength

The alloy is obtd. by incorporating additional Al and rare earth metals (I). The compsn. comprises (in wt. %): C 0.01-0.03, Si 0.17-0.37, Mn 0.35-0.65, P 0.006-0.035, S 0.027-0.04, Cr 0.15-0.30, Ni 0.19-0.25, Al 5.0-7.0 (I) 0.05-0.1 and Fe the rest.
 An alloy contg. (in wt. %): C 0.14, Al 6.9, Si 0.17, Mn 0.35, Cr 0.15, Ni 0.25, (I) 0.05 and Fe the rest, was compared with a known alloy contg. no Al and (I). After heating to 800°C for 100, 1000 and 2000 hrs., the corresp. gains in wt. (in g/m²) were 9.88 and 725, 21.6 and 1350, 31.1 and 1550.

Si too small for claim 4
 Cr too high claim 5
 no Al₂O₃

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La
 etc